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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/822,581

04/12/2004

Robert Burgmeier

S63.2-10865-US01

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490 7590 06/18/2009
VIDAS, ARRETT & STEINKRAUS, P.A.
SUITE 400, 6640 SHADY OAK ROAD
EDEN PRAIRIE, MN 55344

EXAMINER

TRAN, THAO T

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

06/18/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/822,581	Applicant(s) BURGMEIER ET AL.	
	Examiner Thao T. Tran	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,7,10,11 and 45-63 is/are pending in the application.
- 4a) Of the above claim(s) 45-63 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,7,10 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/27/09</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114.

Applicant's submission filed on 3/27/2009 has been entered.

2. Claims 1-3, 7, 10-11, 45-63 are currently pending in this application. Claims 45-63 have been previously withdrawn.

3. Due to the IDS filed on 3/27/2009, a new rejection of the claims is set forth below.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3, 7, 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Padwa (US Pat. 5,082,742) or Roeber et al. (US Pat. 6,386,240), whether alone or in view of Vonk et al. (US Pat. 4,876,130). The references are cited in the IDS of 3/27/09.

Padwa discloses a laminate, comprising a layer of a thermoplastic resin other than a polyolefin and a layer of polyolefin adhered together by a tie-layer system (see abstract). The tie-

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layer system comprises a tie-layer of a functionalized thermoplastic resin and a tie-layer of a functionalized polyolefin; whereas the thermoplastic resin layer and the polyolefin layer are also functionalized so as to effect adhesion between the tie layers (see col. 1, ln. 36-47).

The functional group (coupling agent) of the thermoplastic resin is an epoxy functional groups in an amount of about 0.1% to about 10% by weight, and that of the polyolefin includes acid and anhydride functional groups also present in amounts of about 0.1% to about 10% (see col. 2, ln. 34-60). The functionalization is done at high (melting) temperatures like 145oC and 220oC (see col. 5, ln. 13-16). The thermoplastic resin used can be a polymer containing esters of olefinically unsaturated carboxylic acids, thus it is a polyester.

Roeber discloses a laminate, comprising a layer of polyolefin, a layer of a thermoplastic polyester, and a tie layer in between; the tie layer contains a coupling agent having reactive groups (see paragraph bridging col. 1-2). The reactive groups include epoxy and oxazoline groups (see col. 4, ln. 65-67).

Although neither Padwa nor Roeber teaches the use of a coupling agent that is a polyepoxide or polyoxazoline, the references do teach the coupling agent (functional group) having an epoxy function. Therefore, it would have been obvious to one of ordinary skill in the art to have employed a coupling agent such as polyepoxide for polyoxazoline because these coupling agents have been commonly used in the art to improve adhesion between layers of different polymers.

Moreover, Vonk discloses the use of a coupling agent such as polyepoxide (see paragraph bridging col. 2-3). Therefore, it would have been obvious to one of ordinary skill in the art to have employed a polyepoxide as a coupling agent, as taught by Vonk, in lieu of the coupling

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agent of Padwa or Roeber, because these coupling agents have been commonly used in the art to improve adhesion between layers of different polymers.

Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao T. Tran whose telephone number is 571-272-1080. The examiner can normally be reached on Monday-Friday, from 9:00 a.m. - 5:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on 571-272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thao T. Tran/
Primary Examiner, Art Unit 1794

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